Noranda Mines Limited
P.O. Box 45, Commerce Court West
Toronto, Ont., Canada M5L 1B6

noranda

To the Shareholders:

TAKE NOTICE that the Fifty-Sixth Annual and a General Meeting of the Shareholders of NORANDA MINES LIMITED will be held in the Concert Hall, at the Royal York Hotel in the City of Toronto, Ontario, on Friday, the 27th day of April, 1979, at the hour of 2:30 o'clock (Toronto time) in the afternoon for the following purposes:

(i) to receive reports and financial statements;

(ii) to elect directors;

(iii) to appoint auditors and authorize the directors to fix their remuneration;

(iv) to consider and, if thought fit, to confirm, with or without variation, By-law Number 4 of the Corporation passed by the directors on February 20, 1979, relating to the remuneration of directors of the Corporation;

(v) to consider and, if thought fit, to confirm, with or without variation, Special Resolution Number 1 of the Corporation passed by the directors on February 20, 1979, authorizing changes in the capital of the Corporation.

A copy of the reports and the financial statements to be laid before the Meeting is forwarded herewith. A copy of By-law Number 4 is Exhibit 'A' and a copy of Special Resolution Number 1 is Exhibit 'B' to the Information Circular accompanying this notice.

TAKE NOTICE that Special Meetings of the holders of the Class A shares and Class B shares respectively will be held concurrently at the same place as the Annual and General Meeting to consider and, if thought fit, to confirm, with or without variation, Special Resolution Number 1.

Shareholders who are unable to attend the meetings in person are requested to date, sign and and return enclosed form of proxy in the return envelope provided.

DATED this 9th day of March, 1979.

By Order of the Board,

R. C. ASHENHURST,
Secretary.

noranda

INFORMATION CIRCULAR

This Information Circular accompanies the Notice of the Annual and a General Meeting of the Shareholders of Noranda Mines Limited (the "Corporation") and Special Meetings of the holders of its Class A shares and Class B shares all to be held on April 27, 1979 and is furnished in connection with the solicitation by the management of the Corporation of proxies for use at the Meetings. The solicitation will be primarily by mail but proxies may also be solicited by regular employees of the Corporation. The cost of such solicitation will be borne by the Corporation.

A proxy in the form enclosed with the Notice of Meetings confers discretionary authority with respect to amendments or variations to the matters identified in the Notice or other matters which may properly come before the Meetings.

The shares represented by such a proxy will be voted by the persons named therein and, where a choice is specified, will be voted in accordance with the specification. **Where no choice is specified such shares will be voted for confirmation of By-law Number 4 and Special Resolution Number 1.**

A shareholder has the right to appoint a person (who need not be a shareholder) to represent him at the Meetings other than the persons designated in the form of proxy enclosed with the Notice of Meetings. Such right may be exercised by inserting the name of such person in the blank space provided in such form of proxy.

A proxy in the form enclosed with the Notice of Meetings may be revoked at any time before it is exercised.

VOTING SHARES AND PRINCIPAL HOLDERS THEREOF

At the close of business on March 1, 1979, 23,459,622 Class A shares without par value and 1,742,052 Class B shares without par value of the Corporation were outstanding. Each share, of either Class, entitles the holder to one vote at all Meetings of Shareholders. Shareholders of record at the time of the Meetings are entitled to vote at the Meetings.

The management of the Corporation understands that Hollinger Mines Limited owns 1,801,520 Class A shares or approximately 7.2% of the outstanding shares of the Corporation and that Labrador Mining and Exploration Limited, an affiliate of Hollinger Mines Limited, owns 815,310 Class A shares or approximately 3.2% of the outstanding shares of the Corporation.

3,884,400 additional Class A shares have been set aside to be issued in connection with the proposed merger of the Corporation with Mattagami Lake Mines Limited. The said shares will be issued prior to the Meetings.

ELECTION OF DIRECTORS

It is proposed to nominate the persons listed below for election as directors of the Corporation to serve until the next Annual Meeting of the Shareholders of the Corporation or until their successors are duly elected or appointed, unless any such person is not available to act as a director, in which event a substitute may be nominated.

Proposed Nominees	Principal Occupation	Director Since	Number of Shares Owned March 1, 1979 Class A/Class B
James C. Dudley, New York, New York.	President, Dudley & Wilkinson Inc.	1970	100
Louis Hébert, Montreal, Quebec.	Company Director.	1968	1,000

Proposed Nominees	Principal Occupation	Director Since	Number of Shares Owned March 1, 1979 Class A/Class B
*William James, Toronto, Ontario.	Executive Vice-President, Noranda Mines Limited.	1968	13,250
*A. J. Little, F.C.A., Toronto, Ontario.	Company Director.	1974	4,000
Leonard G. Lumbers, Toronto, Ontario.	Chairman, Noranda Manufacturing.	1962	7,050
David E. Mitchell, Calgary, Alberta.	President and Chief Executive Officer, Alberta Energy Company Ltd.	1973	3,700
André Monast, Q.C., Quebec, Quebec.	Partner in the legal firm of Létourneau & Stein.	1966	2,000
Thomas H. McClelland, Vancouver, British Columbia.	Chairman of the Board, Placer Development Limited.	1975	100
*Alfred Powis, Toronto, Ontario.	Chairman and President, Noranda Mines Limited.	1964	21,050
*William S. Row, Toronto, Ontario.	Chairman, Kerr Addison Mines Ltd.	1960	10,616
*William P. Wilder, Toronto, Ontario.	President and Chief Executive Officer, The Consumers' Gas Company.	1966	10,000
*Adam H. Zimmerman, F.C.A., Toronto, Ontario.	Executive Vice-President, Noranda Mines Limited.	1974	15,030

*Members of the Executive Committee.

NOTES: (1) Shareholdings in subsidiaries:

Mr. William James owns 1,000 common shares of Brunswick Mining and Smelting Corporation Limited.

Mr. L. G. Lumbers owns 1,000 common shares of Brunswick Mining and Smelting Corporation Limited.

Mr. André Monast, Q.C., owns 10 common shares of Brunswick Mining and Smelting Corporation Limited.

Mr. Alfred Powis owns 10 common shares of Brunswick Mining and Smelting Corporation Limited and 3,000 common shares of Fraser Companies, Limited.

Mr. Adam H. Zimmerman owns 7,203 common shares of Fraser Companies, Limited.

(2) The information as to shares beneficially owned, not being within the knowledge of the Corporation, has been furnished by the respective nominees.

REMUNERATION OF MANAGEMENT AND OTHERS

1. Aggregate direct remuneration paid or payable during 1978 by the Corporation and its subsidiaries whose financial statements are consolidated with those of the Corporation to the directors and senior officers of the Corporation $1,317,933

2. Estimated aggregate cost to the Corporation and its subsidiaries in 1978 of all pension benefits proposed to be paid to the directors and senior officers of the Corporation under existing plans in the event of retirement at normal retirement age .... $ 112,377

3. Under a share purchase plan established in 1969, the Corporation advanced money by way of interest-free loan to a Trustee to be applied in payment of the subscription price of shares of the Corporation to be purchased by the Trustee for sale to key employees. During 1978 $1,170,000 was advanced under the plan for the purchase of an aggregate of 45,000 shares for sale to 11 key employees who were directors and/or senior officers. The said shares were authorized for issue on July 11, 1978 at a price of $26.00 per share, the closing price on The Toronto Stock Exchange on that day.

APPOINTMENT OF AUDITORS

The persons named in the form of proxy enclosed with the Notice of Meetings intend to vote for the appointment of Clarkson, Gordon & Co., Chartered Accountants, Toronto at a remuneration to be fixed by the directors.

BY-LAW NUMBER 4

The shareholders of the Corporation will be asked to consider and, if thought fit, to confirm By-law Number 4, a copy of which is Exhibit 'A' hereto, relating to the remuneration of directors. In order to become effective, By-law Number 4 must be confirmed by a majority of the votes cast at the Annual and General Meeting.

Each proposed nominees for election as a director may be said to have a direct interest in the confirmation of By-law Number 4 which increases their remuneration effective May 1, 1979. The remuneration of the directors has not been increased since January 1, 1975.

SPECIAL RESOLUTION NUMBER 1

The shareholders of the Corporation will be asked to consider and, if thought fit, to confirm Special Resolution Number 1, a copy of which is Exhibit 'B' hereto. The Special Resolution must be passed by two-thirds of the votes cast at the Annual and General Meeting and, in addition, by two-thirds of the votes cast at the Special Meetings of the holders of the Class A shares and Class B shares respectively.

As the Income Tax Act (Canada) precludes the payment of tax-deferred dividends on the Class B shares of the Corporation out of tax-paid undistributed surplus or 1971 capital surplus on hand after 1978, there is no further need for two classes of interconvertible common shares. Accordingly, Special Resolution Number 1 authorizes an amendment to the Articles of Amalgamation of the Corporation to reclassify the issued and unissued Class A shares and Class B shares as a single class of common shares to which there is attached no preference, right, condition, restriction, limitation or prohibition. The Special Resolution also authorizes the cancellation of the special shares which will remain unissued after completion of the merger of the Corporation with Mattagami Lake Mines Limited.

The Income Tax Act now permits a form of tax deferral for stock dividends paid by a public company. The directors intend, with respect to cash dividends declared payable on the common shares, to give the holders of the common shares the right to elect to receive such dividends in the form of stock dividends payable in common shares. Further information on such stock dividends and a form of election will be sent to all shareholders as soon as practicable.

OTHER BUSINESS

The management of the Corporation knows of no matters to come before the Meetings other than the matters referred to in the Notice of Meetings.

DATED this 9th day of March, 1979.

Exhibit 'A'
BY-LAW NUMBER 4
A by-law relating generally to the remuneration of the directors.

BE IT ENACTED as a by-law of Noranda Mines Limited as follows:

1. Each director of the Corporation shall be paid remuneration for his services as a director as follows:
   (a) $5,000 per annum;
   (b) an amount in each year equal to $60,000 divided by the aggregate number of attendances by directors at meetings of the board in that year, exclusive of any meeting held immediately following an annual meeting of shareholders, for each such meeting attended by him; and
   (c) in the case of a director who is not an officer or employee of the Corporation or any of its subsidiaries, $625 for each meeting of the executive committee, the audit committee and any other committee of the board attended by him.

Such remuneration shall be payable in such quarterly or other periodic instalments as the board may from time to time prescribe.

2. Subject to prior confirmation by the shareholders of the Corporation, this by-law shall come into effect, and By-law Number 3 shall be repealed, on May 1, 1979. During 1979 remuneration under section 1(b) of each by-law shall be payable in proportion to the part of the year during which each is in force. This by-law shall remain in effect from year to year until amended or repealed.

PASSED by the directors and sealed with the corporate seal this 20th day of February, 1979.

'Alfred Powis'
President and Chairman

'R. C. Ashenhurst'
Secretary

(Corporate Seal)

Exhibit 'B'
SPECIAL RESOLUTION NUMBER 1

RESOLVED by way of Special Resolution that:

1. The Articles of Amalgamation of the Corporation are hereby amended to:
   (i) reclassify the Class A shares without par value and the Class B shares without par value of the Corporation, issued and unissued, into common shares without par value;
   (ii) delete the preferences, rights, conditions, restrictions, limitations or prohibitions attached to the Class A shares and the Class B shares;
   (iii) decrease the authorized capital by cancelling 1,379,556 unissued non-voting redeemable special shares with a par value of $1 each; and
   (iv) declare that the authorized capital of the Corporation, after giving effect to the foregoing, will consist of 40,000,000 common shares without par value.

2. The directors and officers of the Corporation are hereby respectively authorized for and on behalf of the Corporation to execute such documents, including an application for Articles of Amendment, and to take such other action as in their discretion they consider necessary or desirable to implement this Resolution.

Printed in Canada

Noranda Mines Limited
P.O. Box 45, Commerce Court West
Toronto, Ont., Canada M5L 1B6

noranda

To the Shareholders:

As part of the merger with Mattagami Lake Mines Limited, approved by Noranda shareholders on December 27, 1978, Noranda has made a share exchange offer to Mattagami shareholders. The circular issued in connection with this offer contains financial information relating to 1978 operations of Noranda which would not ordinarily be available to Noranda shareholders until the Annual Report is issued in mid March.

In the circumstances, it was considered appropriate to send the shareholders of Noranda this material for their information. No action by Noranda shareholders is required.

A. Powis

Chairman and President

Toronto, Ontario
February 28, 1979.

Consolidated Divisional Results

The consolidated divisional results of Noranda for the five years ended December 31, 1978 were:

	Years ended December 31,				
	1978	1977	1976	1975	1974
		(6) (in thousands)			
REVENUE FROM METALS, PRODUCTS AND CUSTOM TOLLS:					
Copper mining, smelting and refining operations (1)	$ 359,006	$ 309,598	$ 321,413	$ 294,460	$ 394,560
Other mining and metallurgical operations	501,319	429,065	342,557	374,433	343,989
Total mining and metallurgical operations	860,325	738,663	663,970	668,893	738,549
Manufacturing operations	801,275	704,528	575,268	540,304	563,961
Forest products operations	707,384	552,364	489,814	372,664	365,126
Gross revenue	2,368,984	1,995,555	1,729,052	1,581,861	1,667,636
Less: Sales between divisions	110,000	127,000	99,000	85,001	170,023
Sales by associated companies (2)	567,890	472,768	395,298	337,586	345,713
Total revenue	$1,691,094	$1,395,787	$1,234,754	$1,159,274	$1,151,900
EARNINGS:					
Copper mining, smelting and refining operations (1)	$ 52,180	$ 35,225	$ 43,846	$ 30,204	$ 78,548
Other mining and metallurgical operations (3)	53,587	29,283	22,703	38,793	65,449
Earnings from mining investments	1,625	3,906	1,601	1,447	1,816
Gross mining and metallurgical earnings	107,392	68,414	68,150	70,444	145,813
Less exploration written off net of applicable tax reductions	13,348	16,631	10,307	17,889	14,396
Net mining and metallurgical earnings	94,044	51,783	57,843	52,555	131,417
Manufacturing operations and investments (3)	22,517(4)	33,131	8,711	21,086	37,937
Forest products operations (3)	61,681(5)	30,277	18,524	10,532	10,717
Earnings before cost of borrowing	178,242	115,191	85,078	84,173	180,071
Deduct: Cost of borrowing (net of tax)	43,068	43,415	38,343	33,648	25,201
Earnings	$ 135,174	$ 71,776	$ 46,735	$ 50,525	$ 154,870

NOTES:

(1) Consists of operations of the Geco, Bell Copper and Horne mines, the Horne smelter, Mines Gaspé and Canadian Copper Refiners. The Horne mine ceased operations in 1976.

(2) Gross revenues include Noranda's share of the revenues of associated companies accounted for on an equity basis. The share included is as follows:

	Years ended December 31,				
	1978	1977	1976	1975	1974
		(in thousands)			
Mining and metallurgical	$ 153,693	$ 145,578	$ 123,875	$ 121,782	$ 126,338
Manufacturing	122,123	112,220	95,983	98,517	85,736
Forest products	292,074	214,970	175,440	117,287	133,639
	$ 567,890	$ 472,768	$ 395,298	$ 337,586	$ 345,713

(3) The net earnings include Noranda's share of earnings of associated companies accounted for on an equity basis.

(4) Includes abnormal costs of $9,783,000 from the aluminum plant shutdown.

(5) Includes $10,684,000 gain on sale of sawmills.

(6) Restated to reflect the change in valuing inventories described in Note 1(b) to the Consolidated Financial Statements.

NORANDA MINES LIMITED

Consolidated Balance Sheet
(in thousands)

Assets

	Pro Forma (Note 12 (b))	December 31, 1978
Current assets		
Cash and short-term commercial notes	$ 23,224	$ 1,823
Marketable investments, at cost less amounts written off (quoted market value $18,233,000 pro forma; $17,143,000 December 31, 1978)	16,829	15,829
Accounts, advances and tolls receivable	402,061	399,045
Inventories	508,254	466,009
	950,368	882,706
Investments in and advances to associated and other companies (note 2)	353,354	410,029
Fixed assets		
Property, buildings and equipment, at cost	1,878,719	1,703,027
Accumulated depreciation	(815,004)	(744,194)
	1,063,715	958,833
Other assets (note 3)	150,897	123,280
	$2,518,334	$2,374,848

Liabilities

	Pro Forma (Note 12 (b))	December 31, 1978
Current liabilities		
Bank advances (note 4 (c))	$ 133,578	$ 133,578
Accounts payable	321,040	336,666
Taxes payable	78,868	65,801
Debt due within one year (note 4)	65,589	65,089
	599,075	601,134
Deferred liabilities and revenues	34,338	34,338
Taxes provided not currently payable	114,093	99,984
Long-term debt (note 4)	604,586	604,086
Minority interest in subsidiaries	165,673	150,932
Shareholders' equity		
Capital Stock (note 6)	244,802	109,005
Retained earnings	789,840	789,840
	1,034,642	898,845
Less the Company's pro rata interest in its shares held by subsidiary and associated companies	(34,073)	(14,471)
	1,000,569	884,374
	$2,518,334	$2,374,848

(See accompanying notes)

On Behalf of the Board,

(Signed) Alfred Powis, Director

(Signed) A. J. Little, Director

NORANDA MINES LIMITED

Consolidated Statements of Earnings and Retained Earnings

(in thousands)

	For the Years ended December 31,				
	1978	1977 (Note 1 (b))	1976	1975	1974
EARNINGS:					
Revenue:					
Metals, products, custom tolls and other	$1,691,094	$1,395,787	$1,234,754	$1,159,274	$1,151,900
Expense:					
Cost of metal production and products sold	1,211,309	1,036,874	943,850	870,572	734,747
Administration, selling and general expenses	101,157	94,353	87,097	83,909	66,045
Depreciation	78,279	75,103	64,409	62,336	59,834
Development charges	3,784	8,033	5,821	4,004	6,942
Exploration and research written off (note 8)	31,459	35,963	16,970	25,665	22,360
Interest on long-term debt	45,646	44,444	39,604	36,488	30,321
Other interest — net	19,196	27,412	22,048	8,865	3,481
	1,490,830	1,322,182	1,179,799	1,091,839	923,730
	200,264	73,605	54,955	67,435	228,170
Income and production taxes	90,501	22,666	25,068	41,458	106,636
Minority interest in earnings of subsidiaries	24,783	12,625	10,050	10,089	17,099
	115,284	35,291	35,118	51,547	123,735
Earnings of Noranda and subsidiary companies	84,980	38,314	19,837	15,888	104,435
Share of earnings of associated companies (note 2)	49,293	33,462	26,898	34,637	50,435
	134,273	71,776	46,735	50,525	154,870
Gain on sale of assets (note 10 (a))	10,684	—	—	—	—
Aluminum plant shutdown — abnormal costs (note 10 (b))	(9,783)	—	—	—	—
Earnings	$ 135,174	$ 71,776	$ 46,735	$ 50,525	$ 154,870
Earnings per share	$ 5.72	$3.04	$1.98	$2.14	$6.59
RETAINED EARNINGS:					
Balance, beginning of year (including $5,043,000 previously classified as contributed surplus)	$ 685,373	$ 641,895	$ 623,457	$ 620,085	$ 507,552
Earnings	135,174	71,776	46,735	50,525	154,870
	820,547	713,671	670,192	670,610	662,422
Dividends paid (note 6 (b))	30,707	28,298	28,297	47,153	42,337
Balance, end of year	$ 789,840	$ 685,373	$ 641,895	$ 623,457	$ 620,085

(*See accompanying notes*)

NORANDA MINES LIMITED

Consolidated Statement of Changes in Financial Position

(in thousands)

	For the Years ended December 31,				
	1978	1977 (Note 1 (b))	1976	1975	1974
WORKING CAPITAL, BEGINNING OF YEAR	$ 167,330	$ 197,450	$ 188,002	$ 182,890	$ 146,593
SOURCE OF FUNDS:					
Operations —					
Earnings	135,174	71,776	46,735	50,525	154,870
Depreciation and development charges	82,063	83,136	70,230	66,340	66,776
Taxes provided not currently payable	13,075	(3,071)	(31,584)	15,077	37,500
Minority interest in earnings of subsidiaries	24,783	12,625	10,050	10,089	17,099
Share of earnings less dividends of associated companies	(36,786)	(18,532)	(11,535)	(15,162)	(31,940)
	218,309	145,934	83,896	126,869	244,305
Acquisition of Orchan Mines Limited (note 2(d)(iii))	12,407	—	—	—	—
Sale of Northwood Panelboard Ltd. (note 2 (e))	—	6,396	—	—	—
Sale of Northwood Properties Limited (note 10 (a))	7,334	—	—	—	—
Issue of shares	4,256	16	348	251	3,249
Long-term financing	35,244	1,517	108,100	163,800	72,055
Fixed asset disposals	5,478	7,760	8,901	2,076	2,583
Increase (decrease) in deferred liabilities and holdbacks payable	10,208	1,711	(404)	2,210	1,564
	293,236	163,334	200,841	295,206	323,756
APPLICATION OF FUNDS:					
Fixed assets and projects under construction (note 9)	115,083	119,565	115,628	158,147	101,674
Non-current assets (net) of acquired subsidiaries (note 2 (d))	—	—	—	(2,407)	11,394
Dividends paid to					
— shareholders	30,707	28,298	28,297	47,153	42,337
— minority shareholders of subsidiaries	6,143	4,821	4,150	4,410	—
Investments and advances (net)	(2,113)	7,366	(21,880)	31,075	73,418
Current maturities of long-term debt	20,039	11,656	37,797	24,486	33,657
Deferred development, exploration and other expenditures (note 9)	9,135	21,748	27,401	28,111	26,457
Other (net)	—	—	—	(881)	(1,478)
	178,994	193,454	191,393	290,094	287,459
Net increase (decrease)	114,242	(30,120)	9,448	5,112	36,297
WORKING CAPITAL, END OF YEAR	$ 281,572	$ 167,330	$ 197,450	$ 188,002	$ 182,890

(*See accompanying notes*)

NORANDA MINES LIMITED

Notes to Consolidated Financial Statements

1. Accounting Policies

(a) The principal accounting policies followed by Noranda Mines Limited and its subsidiaries are summarized below:

Basis of presentation of financial statements:

The accompanying financial statements are prepared in accordance with accounting principles generally accepted in Canada and include, on a consolidated basis, the accounts of Noranda Mines Limited (the Company) and all of its subsidiaries. The Company together with its subsidiaries is referred to as Noranda. Noranda's interests in associated companies in which it has significant influence but not majority share ownership are accounted for on the basis of cost plus Noranda's equity in undistributed earnings of such companies since the dates of investment. The difference between the cost of the shares of associated companies and the underlying net book value of the assets is amortized over the life of the assets to which the difference is attributed. Other long-term investments are carried at cost less any amounts written off.

Certain subsidiary and associated companies own shares in the Company. The Company's pro rata interest in the carrying value of such shares has been deducted from shareholders' equity. Similarly, the Company's earnings per share have been calculated on the number of shares outstanding after reduction for such intercompany holdings.

Translation of foreign currencies:

Foreign currency assets and liabilities of the Company and its subsidiaries and associated companies are translated into Canadian dollars as follows: working capital at exchange rates prevailing at the end of the period; fixed and other long-term assets, long-term debt, and depreciation provisions on the basis of historic rates of exchange; revenues and expenses (other than depreciation) at average rates during the period. Exchange translation gains and losses from these procedures are included in consolidated earnings.

Inventories:

Mine products are valued at estimated realizable value and other inventories at the lower of cost and market.

Futures contracts:

From time to time, the Company owns futures contracts for the purchase or sale of metals and currencies. These contracts are not reflected in the Company's accounts, beyond the amount of deposit required, until maturity date although provision is made for any estimated unrealized losses.

Depreciation and development charges:

Depreciation of property, buildings and equipment and amortization of development expenditures are based on the estimated service lives of the assets calculated using the method appropriate in the circumstances, for the most part straight-line for fixed assets and unit of production for development.

Exploration:

Mineral and petroleum exploration expenditures are charged against current earnings, unless they relate to properties from which a productive result is reasonably certain or on which work is in process. Gains on sale or recoveries of costs previously written off are normally credited against exploration expense.

Income taxes:

Under the income tax laws, some costs and revenues are included in taxable income in years which are earlier or later than those in which they are included in income reported in the financial statements. As a result of these timing differences, income taxes currently payable normally differ from the provisions for taxes charged to earnings. The differences are shown in the consolidated balance sheet as "Taxes provided not currently payable".

Potential tax savings arising from losses incurred and investment tax credits are not reflected in earnings in the year they arise unless they are virtually certain to be realized.

Interest:

Generally interest expense is accrued and charged against income except interest that can be identified with a major capital expenditure program. Such interest is capitalized during the construction period.

Start-up costs:

Start-up costs on major projects are deferred until the facility achieves commercial production volumes. These deferred costs are written off over a reasonable period on either a straight-line or unit of production basis.

Research:

Research expense is charged against income as incurred.

Aluminum plant:

Certain of the assets and the related debt of the aluminum plant in the City of New Madrid, Missouri, while technically the property and obligation of the City, are carried on Noranda's books by virtue of its long-term lease option and unconditional guarantees.

(b) As of January 1, 1977, the U.S. subsidiary companies adopted the LIFO basis for determining the cost of major inventories pursuant to tax rules in the U.S. which require companies to maintain the accounting for inventories on a tax basis. During 1978, the U.S. tax authorities issued a ruling exempting foreign corporations from this accounting requirement with respect to their consolidated financial statements. As a result, the company reverted to the FIFO basis of inventory cost for these companies.

This change was given retroactive treatment and net earnings for the year 1977, and the previously reported retained earnings at the end of 1977 increased by $4,600,000.

2. Investments

(a) Investments in and advances to associated and other companies consist of:

	Noranda's Direct Interest	Carrying Value (in thousands)
Investments carried on an equity basis		
British Columbia Forest Products Limited	29%	$ 69,082
Craigmont Mines, Limited	20	3,842
Kerr Addison Mines Limited	41	27,444
Mattagami Lake Mines Limited (N.P.L.) (note 12)	34	43,257
Northwood Pulp and Timber Limited	50	50,707
Pamour Porcupine Mines, Limited	49	3,651
Placer Development Limited	32	71,147
Tara Exploration and Development Company Limited (note 2 (c))	41	46,986
Frialco/Friguia Guinean consortium	20	19,492
Other companies	—	51,842
		387,450
Other investments and advances		
Shares, at cost less amounts written off	—	11,055
Advances and other indebtedness (note 2 (c))	—	11,524
		$410,029

(b) Included above are shares carried at a book value of $276,040,000 which had a quoted market value of $367,377,000 at December 31, 1978. The latter amount does not necessarily represent the value of these holdings, which may be more or less than that indicated by market quotations.

(c) $2,016,000 of advances and other indebtedness at December 31, 1978 was secured by shares of Tara Exploration and Development Company Limited.

(d) During the period January 1, 1974 to December 31, 1978, the Company purchased a controlling interest in the following companies:

(i) During 1974 the Company acquired for cash 54.6% of the shares of Fraser Companies Limited (Fraser) and the results of its operations are reflected in the consolidated earnings statements from April 9, 1974, the date of acquisition. The net book value of the assets acquired exceeded the total cost to the Company by $9,097,000. This difference was attributed to fixed assets and was deducted therefrom on the consolidated balance sheet.

(ii) On January 8, 1975 Wire Rope Industries (previously 40% owned) became a consolidated subsidiary and on March 11, 1975, Northwood Mills Ltd., a wholly-owned subsidiary acquired all the outstanding shares of Airscrew-Weyroc Canada Limited (now Northwood Panelboard Ltd.). The results of operations of these companies have also been included in the consolidated earnings statement from dates of acquisition. There was no significant purchase price discrepancy.

(iii) Effective December 31, 1978 the company amalgamated with Orchan Mines Limited and continued as Noranda Mines Limited. In connection with this amalgamation 554,143 shares of the Company were issued at $35 per share for a total of $19,395,000. Because shares of Orchan were held by associated companies, the Company's pro rata interest in its shares held by subsidiary and associated companies was increased resulting in net consideration of $16,902,000.

This transaction, which was accounted for by the purchase method, is summarized below;

	(in thousands)
Non-current assets	
Fixed—including adjustments to fair value of $4,358,000	$18,629
Other	3,164
	21,793
Long term liabilities	5,185
Non-curent assets — (net)	16,608
Working capital increase	12,407
Total net assets	29,015
Less investments in and advances to Orchan prior to amalgamation	12,113
Capital stock issued — net	$16,902

(e) As of December 31, 1977, Northwood Mills Limited, a wholly-owned subsidiary, disposed of all of the outstanding shares of Northwood Panelboard Ltd. to Northwood Pulp and Timber Limited (a 50% owned company) for a cash consideration of $1 and additional future consideration related to cash flow.

The effect of this transaction, and the payment of $1,000,000 by Northwood Panelboard on its indebtedness to Northwood Mills, on Noranda's balance sheet is summarized below:

	(in thousands)
Reduction of non-current assets—	
Fixed	$9,670
Other	1,066
	10,736
Reduction of long-term-debt	4,340
Non-current assets (net)	6,396
Working capital increase	1,957
Increase in investment and advances to associated companies	$4,439

(f) As of December 31, 1978, the balance of the shares in Central Canada Potash Co. Limited were purchased in consideration for a note payable over a period of approximately three years and Central Canada became a wholly-owned subsidiary of the Company. The present value of this payable at December 31, 1978 has been included with deferred liabilities.

3. Other assets

	Pro-Forma	December 31, 1978
	(in thousands)	
Deferred development and start-up costs	$117,525	$ 90,952
Deferred exploration expenditures	16,161	16,161
Other deferred assets	10,849	9,805
Debenture and revenue bond discount and financing expenses, at cost less amortization	6,362	6,362
	$150,897	$123,280

4. Debt

(a) Long-term debt:

	(in thousands)
Noranda Mines Limited	
9¾% notes due July 15, 1982	$ 25,000
9¾% notes due November 1, 1980 (of which $15,000,000 is payable in U.S. currency)	25,398
7½% sinking fund debentures maturing October 1, 1988	23,668
9¼% sinking fund debentures maturing October 15, 1990	35,659
9¾% sinking fund debentures maturing May 1, 1994	46,950
Noranda Aluminum, Inc.	
10½% secured notes repayable at various dates up to October 1, 1995 ($80,000,000 U.S.)	81,360
5.90% industrial revenue bonds, and sinking fund issues, maturing November 1, 1993 ($68,050,000 U.S.)	72,983
8% pollution control revenue bonds due April 1, 2001 ($10,500,000 U.S.)	10,315
9¾% notes repayable at various dates up to January 10, 1987 ($30,000,000 U.S.)	35,229
Norandex Inc.	
5½%-10% mortgage notes payable in monthly instalments to 2002 ($6,485,000 U.S.)	6,974
Brunswick Mining and Smelting Corporation Limited	
5.85% first mortgage sinking fund bonds, series "A" maturing April 1, 1986	8,662
7¼% general mortgage sinking fund bonds, series "A" maturing August 15, 1987	8,486
11% general mortgage sinking fund bonds, series "B" maturing December 1, 1996	35,000
Fraser Companies, Limited	
6⅛% sinking fund debentures series "A" maturing April 1, 1987 ($6,750,000 U.S.)	7,369
10¾% sinking fund debentures series "B" maturing June 1, 1992 ($35,000,000 U.S.)	35,612
Sundry indebtedness	8,319
	466,984
Notes payable (note 4 (b))	202,191
	669,175
Debt due within one year (including notes payable of $52,191,000)	65,089
	$604,086

Maturities of long-term debt are as follows:

1980—$43,261,000; 1981—$20,552,000; 1982—$195,916,000 and subsequent—$344,357,000.

(b) $150,000,000 of notes payable, representing promissory notes with varying maturities of less than one year from December 31, 1978 have been classified as long-term debt to the extent of the unconditional commitment the Company has received from its bankers for contractual term credits expiring December 31, 1982.

(c) Accounts receivable and inventory of a subsidiary have been pledged as collateral for demand loans of $12,376,000 to that company.

5. Commitments and Contingent Liabilities

(a) Approved capital projects and financing commitments outstanding total approximately $90,000,000 at December 31, 1978.

(b) The Company and its subsidiaries have guaranteed or are contingently liable for repayment of loans of associated and other companies to the extent of approximately $31,000,000 at December 31, 1978.

(c) As at December 31, 1978 Noranda's total unfunded obligations under its pension plans is estimated at $22,000,000. These obligations are funded as required by applicable governing legislation. In Canada, the unfunded obligations will be funded and absorbed against income through annual instalments not exceeding $1,600,000 over periods up to fourteen years. $11,600,000 of the unfunded obligations relating to U.S. subsidiaries, will be amortized over periods up to forty years in annual instalments not exceeding $500,000.

(d) The Company and certain of its subsidiaries from time to time enter into long-term lease arrangements for buildings such arrangements currently giving rise to annual charges totalling approximately $3,000,000.

(e) The Company is one of twenty-nine defendants, described as uranium producers and located in various countries, to a private antitrust action instituted by Westinghouse Electric Corporation in the United States District Court alleging the existence of a conspiracy among such producers to restrain interstate and foreign commerce in uranium. A second action alleging the existence of the same conspiracy has been brought against the company and seven other defendants by the Tennessee Valley Authority. It is expected that the damages ultimately claimed by the plaintiffs will be substantial.

The Company and 3 associated companies are among 14 defendants in an action instituted in the Superior Court of the Province of Quebec by various groups of and individual Cree Indians for damages of $8,034,000 and injunctive relief in respect of alleged environmental contamination and other interference with alleged territorial rights of the Cree Indians in Northern Quebec.

The Company is defending these actions and believes it has good defences on the merits.

6. Shareholders' Equity

(a) Authorized Capital

The authorized capital consists of 40,000,000 shares of no par value. In addition, a special meeting of shareholders held on December 27, 1978 approved by Special Resolution an increase in the authorized capital of the company by the creation of 22,000,000 non-voting redeemable special shares with a par value of $1 each redeemable at $10 per share for use in connection with the Mattagami merger.

(b) The issued capital stock is summarized below:

	Pro-Forma (note 12 (b))	December 31, 1978
	(Shares)	
Class A shares	27,065,027	23,185,116
Class B shares	1,997,428	1,997,428
Total	29,062,455	25,182,544
Company's pro rata interest in its shares held by subsidiary and associated companies	1,509,149	950,678

Dividends were declared as follows:

	For the Years ended December 31,				
	1978	1977	1976	1975	1974
Dividends per share—					
Class A	$ 1.30	$ 1.20	$ 1.20	$ 2.00	$ 1.80
Class B	$ 1.30	$ 1.155	$ 1.02	$ 1.70	$ 1.53
Total dividends paid (in thousands)—					
Class A	$29,173	$26,649	$26,630	$46,206	$41,594
Class B including 15% tax on undistributed income on dividends paid prior to March 31, 1977	2,681	2,708	2,723	2,711	2,290
	31,854	29,357	29,353	48,917	43,884
Less the Company's pro rata share of dividends paid to subsidiary and associated companies	1,147	1,059	1,056	1,764	1,547
Net charge to retained earnings	$30,707	$28,298	$28,297	$47,153	$42,337

The following table summarizes the shares issued during the year.

Total issued at December 31, 1977	24,464,511
Issued under stock option plan	22,490
Issued under share purchase plan	141,400
Issued on amalgamation with Orchan (Note 2(d)(iii))	554,143
Total issued at December 31, 1978	25,182,544

The earnings per share calculations have been based on the weighted average number of shares outstanding, 23,646,648, in 1978 and 23,582,023 in 1977. Subsequent to December 31, 1978 additional shares will be issued under the merger with Mattagami as summarized in Note 12.

Classes A and B shares are voting, convertible into one another on a share for share basis and rank equally with respect to dividends and in all other respects.

(c) (i) During the year ended December 31, 1978, 22,490 shares in the Company's capital stock were issued under the Company's stock option plan for $577,920 and under the Company's share purchase plan 141,400 shares were issued for $3,676,400.

(ii) Under the provisions of the stock option plan, options were granted during the year ended December 31, 1978 on 137,400 shares exercisable up to July, 1986 at $25.03 per share and options on 1,700 shares were cancelled.

At December 31, 1978 options on 165,185 shares were outstanding exercisable at prices varying from $25.03 to $28.50 for periods up to 1986.

(d) Under the Company's share purchase plan shares are sold to a trustee for resale to employees financed by an interest-free loan from the Company. At December 31, 1978 the amount of the loan included in accounts receivable was $7,700,000.

7. Income Taxes

At December 31, 1978 certain subsidiaries of the Company had estimated loss carry forwards of approximately $9,400,000 which have not been recognized in the accounts. Investment tax credits of $7,700,000 are also available.

8. Exploration Expense

Gains on the sale of Noranda's interest in certain properties have been offset against exploration expenditures written off in the amount of $4,724,000 in 1974 and $9,000,000 in 1976.

9. Oil and Gas Agreements

Under various joint venture agreements, other companies have agreed to participate in Noranda's exploration and development program and are obligated to contribute $62,745,000 in order to earn and maintain varying interests in the lands covered by the agreements. The amounts shown by Noranda as expended on fixed assets and exploration have been reduced by $44,694,000 and $18,051,000 respectively as a result of the participation referred to above. To maintain present interests, further expenditures will be shared with Noranda in proportion to the respective interest in the program.

Under a major farm-out agreement, a subsidiary of Imperial Oil Limited may earn interests varying from 12½% to 17½% in specified lands by expending a minimum of $150,000,000 with additional options to spend $29,000,000. At the conclusion of this agreement the Company's direct interests will be 64.6% in the Elmworth-Wapiti properties and 60.4% in all other properties.

Under various agreements the Company has received $7,700,000 in 1978 in respect of gas to be delivered in future years. This balance has been included with deferred liabilities and revenues and will be brought into income when the gas is delivered.

10. Unusual Items

(a) On September 22, 1978, Northwood Mills Limited, a wholly-owned subsidiary, disposed of its interest in two sawmills through the sale of all the outstanding shares of Northwood Properties Limited, realizing a gain of $10,684,000.

The effect of this transaction on Noranda's financial statements is summarized below:

	(in thousands)
Reduction of non-current assets (net)	$(7334)
Working capital increase (net)	18,018
Gain on sale	$10,684

(b) The aluminum reduction plant was shut down for two months in early 1978 due to the failure of Associated Electric Cooperative, Inc. to supply power during the last stages of a coal strike in the United States. Abnormal costs totalling $9,783,000 after tax including estimated costs of shut-down and start-up and cost of emergency power have been shown separately in the accompanying consolidated statement of earnings.

11. Anti-Inflation Program

During the period from October 14, 1975 through December 31, 1978 the Company and its subsidiaries and associated companies in Canada were subject to, and believe they complied with, controls on prices, profits, employee compensation and shareholder dividends under the Federal Government's Anti-Inflation Program.

12. Subsequent Events

(a) Merger with Mattagami Lake Mines Limited

Under a merger proposal approved by shareholders of both companies the Company acquired on January 2, 1979, the assets and business of Mattagami Lake Mines Limited in return for the issue of special shares of the Company to Mattagami. The Company has undertaken to make an offer to Mattagami shareholders to exchange one Noranda share for each two and one-quarter Mattagami shares held. After the completion of this offer the Company will redeem the special shares in exchange for the issue of 206,204,000 principal amount of a newly created debenture of the Company convertible into Class A shares of the Company at $35 per share. Mattagami will immediately cause these debentures to be converted, and distribute the resulting Noranda shares to its shareholders with the effect that each Mattagami shareholder will receive one Noranda share for each two and one-quarter shares of Mattagami held. Shares issued to the Company will be cancelled.

(b) Pro Forma Consolidated Balance Sheet

The pro forma consolidated balance sheet gives effect as of December 31, 1978 to the merger with Mattagami which will be accounted for by the purchase method, the effect of which is as follows:

(i) The issue of 3,879,911 shares of the Company to which the directors have attributed a value of $35.00 in exchange for the shares of Mattagami not already owned for a total consideration of $135,797,000. Because shares of Mattagami were held by associated Companies, the Company's pro rata interest in its shares held by subsidiary and associated companies increased by 558,471 shares resulting in net consideration of $116,195,000. Details of the Company's shares outstanding after this transaction is completed are set out on a pro forma basis in Note 6 (b).

(ii) This transaction is summarized below:

	(in thousands)
Non-current assets—	
Fixed—including adjustments to fair value of $57,008,000	$104,882
Other	32,453
	137,335
Long-term liabilities	29,350
Non-current assets (net)	107,985
Working capital increase	69,721
Total net assets	177,706
Less investments in and advances to Mattagami prior to acquisition	61,511
Capital stock issued—net	$116,195

The results of operations of Mattagami will be included in the consolidated results of the Company subsequent to the date of acquisition. Prior to December 31, 1978, the Company's pro rata interest in the operations of Mattagami had been included in consolidated operations on the equity basis of accounting.

(c) Proposed Sale of Bell Copper Mine

An agreement has been reached to sell the Bell Copper mine and concentrator, subject to the approval of the sale under the Foreign Investment Review Act (Canada), for a price $22 million plus working capital plus up to an additional $3 million contingent upon satisfactory expansion of the concentrator capacity by Noranda. This transaction is not reflected in the accompanying statements.

(d) Purchase of Aluminum Casting, Sheet and Foil Plant

Noranda Aluminum purchased an aluminum casting, sheet and foil plant in Huntington, Tennessee on January 2, 1979, for a price of approximately $40 million U.S. including working capital.

Auditors' Report

To the Directors of
Noranda Mines Limited:

We have examined the consolidated balance sheet and pro forma consolidated balance sheet of Noranda Mines Limited as at December 31, 1978 and the consolidated statements of earnings, retained earnings and changes in financial position for the five years then ended. Our examination of the financial statements of Noranda Mines Limited and those subsidiaries and associated companies of which we are the auditors was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances. We have relied on the reports of the auditors who examined the financial statements of the other subsidiaries and associated companies.

In our opinion:

(a) The accompanying consolidated balance sheet presents fairly the financial position of the company as at December 31, 1978;

(b) The accompanying pro forma consolidated balance sheet presents fairly the financial position of the company as at December 31, 1978 after giving effect to the transactions set forth in Note 12(b);

(c) The accompanying consolidated statements of earnings, retained earnings and changes in financial position present fairly the results of operations and changes in financial position of the company for the five years ended December 31, 1978;

all in accordance with generally accepted accounting principles applied on a consistent basis after giving effect to the changes, with which we concur, explained in Note 1(b) to the consolidated financial statements.

Toronto, Canada
February 19, 1979.

(Signed) CLARKSON, GORDON & CO.
Chartered Accountants

Printed in Canada